MANUAL OF ENVIRONMENTAL MICROBIOLOGY

FOURTH EDITION

The single most comprehensive resource for environmental microbiology

Environmental microbiology, the study of the roles that microbes play in all planetary environments, is one of the most important areas of scientific research. The *Manual of Environmental Microbiology, Fourth Edition*, provides comprehensive coverage of this critical and growing field.

Thoroughly updated and revised, this manual is the definitive reference for information on microbes in air, water, and soil and their impact on human health and welfare. Written in accessible, clear prose, this manual covers four broad areas: general methodologies, environmental public health microbiology, microbial ecology, and biodegradation and biotransformation. This wealth of information is divided into 17 sections each containing chapters written by acknowledged topical experts from the international community.

Specifically, the new edition of this manual

- Contains completely new sections covering microbial risk assessment, quality control, and microbial source tracking
- Incorporates a summary of the latest methodologies used to study microorganisms in various environments
- Synthesizes the latest information on the assessment of microbial presence and microbial activity in natural and artificial environments

The *Manual of Environmental Microbiology* is an essential reference for environmental microbiologists, microbial ecologists, and environmental engineers, as well as those interested in human diseases, water and wastewater treatment, and biotechnology.

Marylynn V. Yates, Ph.D., is Editor in Chief of this manual and professor of Environmental Microbiology and Distinguished Teaching Professor at the University of California, Riverside. Her research interests include characterizing and predicting the fate and transport of human enteric pathogenic microorganisms in soils, water, and wastewater; development of methods for rapid, sensitive detection of infective enteric viruses in water samples; human pathogen considerations associated with wastewater reuse and biosolids application to land; and the use of indicators for predicting pathogen occurrence and behavior in the environment. She is a fellow of the American Association for the Advancement of Sciences, the American Academy of Microbiology, and a National Associate of the National Academies of Science.

AMERICAN SOCIETY FOR MICROBIOLOGY

ISBN 9781555816025

90000 >

9 781555 816025